## ON THE GENERIC NAME OF THE CODLING MOTH.\*

By August Busck.

When I lately (Proc. Wash. Ent. Soc., II, p. 235, 1903) described a striking western variety of the codling moth as *Cydia pomonella* var. *simpsonii*, I used the generic name *Cydia* on the strength of Lord Walsingham's conclusion (Proc. Zoöl. Soc. Lond., 1897, p. 130) that *Cydia* was the proper name for the genus, and I employed the name without investigation the more confidently because it had been adopted by our American authority on the Tortricidæ, Professor C. H. Fernald in his recent list (U. S. Nat. Museum Bull. 52, p. 471, 1903).

Since then however Professor T. D. A. Cockerell has kindly called my attention to a footnote in his bulletin on the codling moth (N. Mex. Coll. Agr. Sta. Bull. 25, p. 47, 1898) in which he, through a dexterous and logical manipulation of Lord Walsingham's own arguments comes to a different result in favor of the long and generally used name *Carpocapsa*, and being asked for my opinion about the proper name to be used in a forthcoming departmental bulletin I was led to go over the ground independently.

As I come to the same result as Professor Cockerell in favor of the time-honored *Carpocapsa* though on different grounds, I venture to give these in the hope that it may lead to a much needed generally adopted scientific name for this insect.

I wish to acknowledge my indebtedness to Mr. Nathan Banks, whose intimate knowledge of the old literature—so willingly imparted—has helped me greatly in this study.

I also wish to thank Professor C. H. Fernald who most generously came to my assistance in the last moment, when he realized that I had committed an excusable but griveous error, which he was able to correct.

Up to the year 1818 pomonella Linné was placed in one or another of the roomy genera *Tinea* and *Tortrix*.

In that year Hübner erected his genus *Cydia* (Verz. bekannt. Schmett., p. 375) including three species, *pomonella*, Linn., *aspidiscana* Hübn. and *monetulana* Hübn. (= hohenwarthiana, Schiffermüller and

<sup>\*</sup> Read before Washington Entomological Society, May 14, 1903.

Denis = cana Haworth). All three species are generically distinct and Hübner did not indicate which was the type; this consequently must be determined by elimination.

In 1829 Treitschke erected the genus Carpocapsa (Treitschke Schmett. Eur., VII, p. 231) and on the next page of the same work his genus Grapholita appeared; the first of these genera contained pomonella Linn. and four other species, the latter contained hohenwarthiana, Schiff. and Den., aspidiscana. Hübn. and eight others. No type was indicated for either genus.

From these facts Lord Walsingham concluded (Proc. Zoöl. Soc. Lond., 1897, p. 130) that one or another of Treitschke's two genera must fall as synonyms with *Cydia* of Hübner and making use of a subsequent work by Stephens (Ill. Brit. Ent., Haust., IV, p. 119, 1834) he determined that *Carpocapsa* should fall, while if his premises—that one of the two genera must fall—had been right, *Grapholita* should logically fall as pointed out by Prof. Cockerell and *Carpocapsa* be retained as the first restriction of *Cydia* on account of its page precedence.

As, however, a genus is not fixed before its type is determined and as both *Carpocapsa* and *Grapholita* of Treitschke contained several other species besides the three in Hübner's *Cydia* none of them is necessarily synonymous with this genus; in fact none of them could rightfully be made such according to the rules of nomenclature unless all the species contained in them were truly congeneric, which is not the case.

But the type of *Carpocapsa* had already been fixed as *pomonella* before the above-mentioned work of Stephens, by Curtis (Brit. Entom., VIII, p. 352, 1831), and that species could therefore not rightfully subsequently be fixed as the type of *Cydia*, which must be one of the remaining species of that genus.

Besides Curtis' work another earlier reference bearing on the subject is found, namely Kirby's and Spence's Introduction to Entomology in which in Vol. III, p. 123, 1826, pomonella Linn. is given the generic name Erminea.

This being the earliest elimination from *Cydia* it would have held good for *pomonella*, which as the only species mentioned must be regarded as the type of the genus, if the name *Erminea* had not previously been used in another sense by Haworth.\*

<sup>\*</sup> That such is the case I did not realize before Professor Fernald called my attention to it.

To put it in more schematic form and in chronological order:

I. Hübner, Verz., p. 375, 1818.

Cydia Hübner.

pomonella Linn.

aspidiscana Hübn.

monetulana Hübn. (=cana Haw. =hohenwarthiana Schiff.).

All three species belong to different genera; no type indicated.

II. Kirby & Spence, Intr. Ent., III, p. 123, 1826.

Erminea Kirby & Spence.

pomonella Linn.

This being the first restriction of Cydia and pomonella being the only species mentioned in the genus it must be the type of that genus, but as the name Erminea was preoccupied in another sense by Haworth [Lep. Brit., III, p. 512, 1812] this name cannot be employed for pomonella.

The date of Erminea Haworth is given by C. O. Waterhouse in his Index Zoölogicus, 1902, as 1828, the correct date of Volume IV of Haworth's Lep. Brit., on the first page of which (p. 512) the genus appears. This would make Erminea Haworth subsequent to Erminea of Kirby and Spence, whose name thus would stand, but Professor Fernald informs me that part of that particular page (512) was published already in Haworth's Volume III, 1811, and subsequently republished as the first page of Vol. IV.

Professor Fernald writes (letter of May 26, 1903): "Erminea was first established, so far as I know, by Haworth on the last page of his Lepidoptera Britannica, which was published in 1811. The genus was described and the species evonymella was given with its synonymy and description and then irrorea was given with the Latin diagnosis, which was all there was room for on this page."

"Part IV of the Lepidoptera Britannica was published in 1828, as shown on the outside cover of my copy, and also the date is given on the last page in this part. Page 512 was reprinted as the first in Part IV. The author in the postscript at the end of the work gives his reason for doing this. Waterhouse evidently found Erminea on the first page in Part IV, but overlooked the fact that it had already been printed in Part III. Tutt in his British Lepidoptera has made the same error. My copy is in the original parts, a condition in which the work is now rarely found."

I should have been able to find this state of affairs out through a more careful perusal of Stainton's Cat. Brit. Lep., III, 1851, on which work, together with those of the modern authorities, I depended for the date of Erminea Haworth. As however the only reference to Erminea in the index of Stainton's work is to page 34 and there is given the year 1829 as the date for the identical page 512 on which Erminea is erected it did not occur to me to look further, before aroused by Professor Fernald's letter. On page 36 Stainton gives the date for page 512 as 1812 and 1829 and on page 37 the single date 1812.

```
III. Treitschke, Schmett. Europe, VIII, p. 231, 1829.
       Carpocapsa Treitschke.
         pomonana Linn.
         splendana Hübn.
         woeberiana Schiff.
         arcuana Linn.
         aurana Hübn.
   No type indicated.
IV. Treitschke, Schmett, Europe, VIII, p. 232, 1829.
       Grapholita Treitschke.
   Fam. A. hohenwarthiana Schiff. (= monetulana Hübn.).
      hypericana Hübn.
       aspidiscana Hübn.
       zachana Hübn.
   Fam. B. lunulana Schiff.
      dorsana Hübn.
      montana Schiff.
      ephippana Hübn.
      trauriana Hübn.
      gundiana Hübn.
   No type indicated.
V. Stephens, Cat. Brit. Ins., H, p. 179, 1829 (1830?)
      Semasia Stephens.
        pomonella Linn.
         splendana Hübn.
         grossana Haw.
         weeheriana Schiff.
         rheediella Linn.
         lanceolana Hübn.
         hypericana Hübn.
         perlepidana Haw.
         pupillana Linn.
         pulvana Steph.
         cana Haw. (= monetulana Hübn.).
         scopoliana Haw.
         rufana Steph.
   No type indicated.
VI. Curtis, Brit. Entom., VIII, p. 352, 1831.
```

Curtis designated *Tinea pomonella* Linn. as the type of *Carpocapsa* Treitschke. This definite assignment of *pomonella* as type of *Carpocapsa* was perfectly legitimate when *Ermenia*, Kirby and Spence is invalid and effectually settles the question as far as *pomonella* is concerned. That species must from that date rightfully be known as *Carpocapsa pomonella*. Lord Walsingham evidently overlooked this reference in 1897.

VII. Stephens, Ill. Brit. Entom., IV, p. 119, 1834.

Stephens makes *Cydia* a subdivision of his enlarged conception of *Carpocapsa* including in it *pomonella* Linn., *splendana* Hübn., *grossana* Haw., *aspidiscana* Hübn., thereby making the latter the type of *Cydia*, *pomonella* being already constituted types of *Carpocapsa* and *grossana* and *splendana* not being found in the original *Cydia* of Hübner.

Thus Carpocapsa should stand for the genus of which pomonella Linn. is the type, the Carpocapsa of Meyrick (Handbook Brit. Lep., p. 515, 1895) and Rebel (Staudinger and Rebel, Cat. Lep. Europe, II, p. 125, 1901) and the Cydia of Walsingham (Proc. Zoöl. Soc. Lond., p. 130, 1897) and of Fernald (U. S. Nat. Mus. Bull. 52, p. 471, 1903).

Cydia Hübner should be used for the genus of which aspidiscana Hübn. is the type as rightly employed by Meyrick instead of Semasia of Rebel's Catalogue and instead of Thiodia of Walsingham and Professor Fernald.

As a well-known entomologist, whose oral parts are developed on more romantic curves than mine expressed it:

"Fair Lady Pomonella was the heiress to all the apple orchards of the Pacific Northwest. Count Cydia and Baron Carpocapsa were two adventurous Austrian noblemen with a long black history. For many years Lady Pomonella, under the care of her guardian Sir John Curtis, had been keeping company with Baron Carpocapsa and it seemed that their marriage was assured. But her godfather Lord Walsingham who had heard of her early affection for Count Cydia discovered that nobleman in retirement at Stephen's hermitage. He reintroduced Count Cydia, who soon won Lady Pomonella's affection and their announcements were even published by Father Fernald in Dyar's Bluebook of the best Society in spite of hermit Cockerell's earnest protestations. At this moment, an alleged English Knight Earl Erminea of Kirbyshire, who had crossed foreign seas to fight the haughty Saracen,

returned and induced Busck's Detective Agency under promise of fame and fortune to introduce him to Lady Pomonella, whom he had not seen since his boyhood.

"He then attacked Baron Carpocapsa with three years' priority, stabbed Count Cydia with a monotype and eloped with the blushing Lady Pomonella. But alas! It was a short-lived bliss, as they were confronted at the very altar by Father Fernald who had looked up Earl Erminea's credentials and soon discovered that he was a preposterous pretender, travelling under the assumed name of the long-deceased Prince Erminea of Haworthia, and he was consequently at once ignominiously dumped into the sheol of homonymy.

"And Baron Carpocapsa regained consciousness in the nick of time and was brought to the altar to the anxious bride Pomonella, who was trembling lest the ceremony should again be nolle prossed.

"May they now live in peace!"

## PROCEEDINGS OF THE NEW YORK ENTO-MOLOGICAL SOCIETY.

MEETING OF TUESDAY, JANUARY 6, 1903.

The annual meeting of the Society was held at the American Museum of Natural History. President Groth in the chair. Sixteen members present.

The report of the treasurer was presented and referred to the Auditing Committee.

Mr. Leng reported that a room had been reserved at the Hotel Endicott for the evening, January 24, when the annual dinner of the Society would take place.

A canvass of the members present was taken to determine the number who would attend the dinner. Seventeen signified their intention to be present.

On motion the dinner committee were instructed to invite the members of the Brooklyn Entomological Society.

Nominations for the elections of officers for the year 1903 were then called for, and the following names were presented:

For President, C. F. Groth and Wm. Beutenmüller; \* Vice-President, Charles W. Leng; Recording and Corresponding Secretary, H. G. Barber; Treasurer, L. H. Joutel and E. G. Love; Librarian, C. Schaeffer; Executive Committee, W. D. Kearfott, W. T. Davis, E. B. Southwick, C. Roberts, Wm. Beutenmüller, Charles Palm, H. F. Kudlich, G. Beyer, Charles W. Leng and C. F. Groth; Publication Committee, E. G. Love, C. Schaeffer, L. H. Joutel, H. Hug, W. D. Kearfott, Henry Bird and Wm. Beutenmüller. The following were elected:

<sup>\*</sup> Name withdrawn at request of candidate.